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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,317	08/14/2006	Bernhard Moser	3635	6836

7590
Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

EXAMINER

FULLER, ROBERT EDWARD

ART UNIT	PAPER NUMBER
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3676

MAIL DATE	DELIVERY MODE
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08/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,317	Applicant(s) MOSER ET AL.	
	Examiner ROBERT E. FULLER	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's submission, filed May 4, 2009, has been carefully considered. Examiner has withdrawn the rejection under 35 U.S.C. 112, 2nd Paragraph set forth in the previous Office Action based on the claim amendments as well as applicant's Remarks. The prior art rejection based on the Huber reference has also been withdrawn. The prior art rejection based on the Dunn et al. reference has been modified. The previously-indicated allowability of the subject matter in claims 3 and 4 has also been withdrawn, and those claims now stand rejected. Therefore, this Office Action has not been made final.

Claim Rejections - 35 USC § 102/103

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dunn et al. (US 6,595,305).

With regard to claim 1, Dunn discloses a drilling tool (150) for percussion drilling, which comprises a cutting element (162) that is configured as a plate or head and that has at least one cutting edge (184) defined by a cutting face (174) and a free face (160), wherein the cutting edge is associated with a first free face section (see Figure 1 below) which lies in a cutting plane, wherein the cutting plane (CP) is cut at a right angle to the cutting edge and wherein the first free face section is limited by a convex bulge (see Figure 1 below) or a convex polygon outline, and a rib (see Figure 1 below).

Under 35 U.S.C. 102:

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With regard to the rib height ranges in claims 1, 2, 8, 9, 10, and 11, the size of the rib falls within the claimed range, as the rib is only defined by a first free face section and an associated first cutting face section, and examiner can assign where the first free face begins in Dunn. Therefore, the first free face begins 0.5 mm below the cutting edge.

Under 35 U.S.C. 103:

Alternatively, with further regard to claims 1, 2, 8, 9, 10, and 11, one can interpret Dunn in such a way that Dunn does not disclose the claimed rib height. Even so, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Dunn to have had a rib height within the range of 0.1 to 0.5 mm, depending on the desired wear characteristics of the bit, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 3, 4, 10, and 11, as discussed above with respect to the 35 U.S.C. 102 interpretation, examiner can arbitrarily assign how the rib is defined. Therefore, examiner defines the boundary of the first free face section to be at an angle, so that either the height of the rib increases or decreases toward the longitudinal axis.

With regard to claims 5 and 6, Dunn discloses a second free face section and a second cutting face section (see Figure 1 below).

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With regard to claim 7, an extension (see “V” in Figure 2 below) of the second free face section extends in a direction of rotation of the drilling tool through the cutting element below the cutting edge.

With regard to claim 9, as discussed above, examiner has arbitrarily assigned where the first free face and second free face sections meet, therefore, claim 9's limitations are met, since Dunn inherently discloses planes P and E, and they are parallel. Note that claim 9 can only read on the embodiment of the invention in which the height of the rib does *not* increase or decrease toward the longitudinal axis, since in those two cases, the planes P and E would not be parallel.

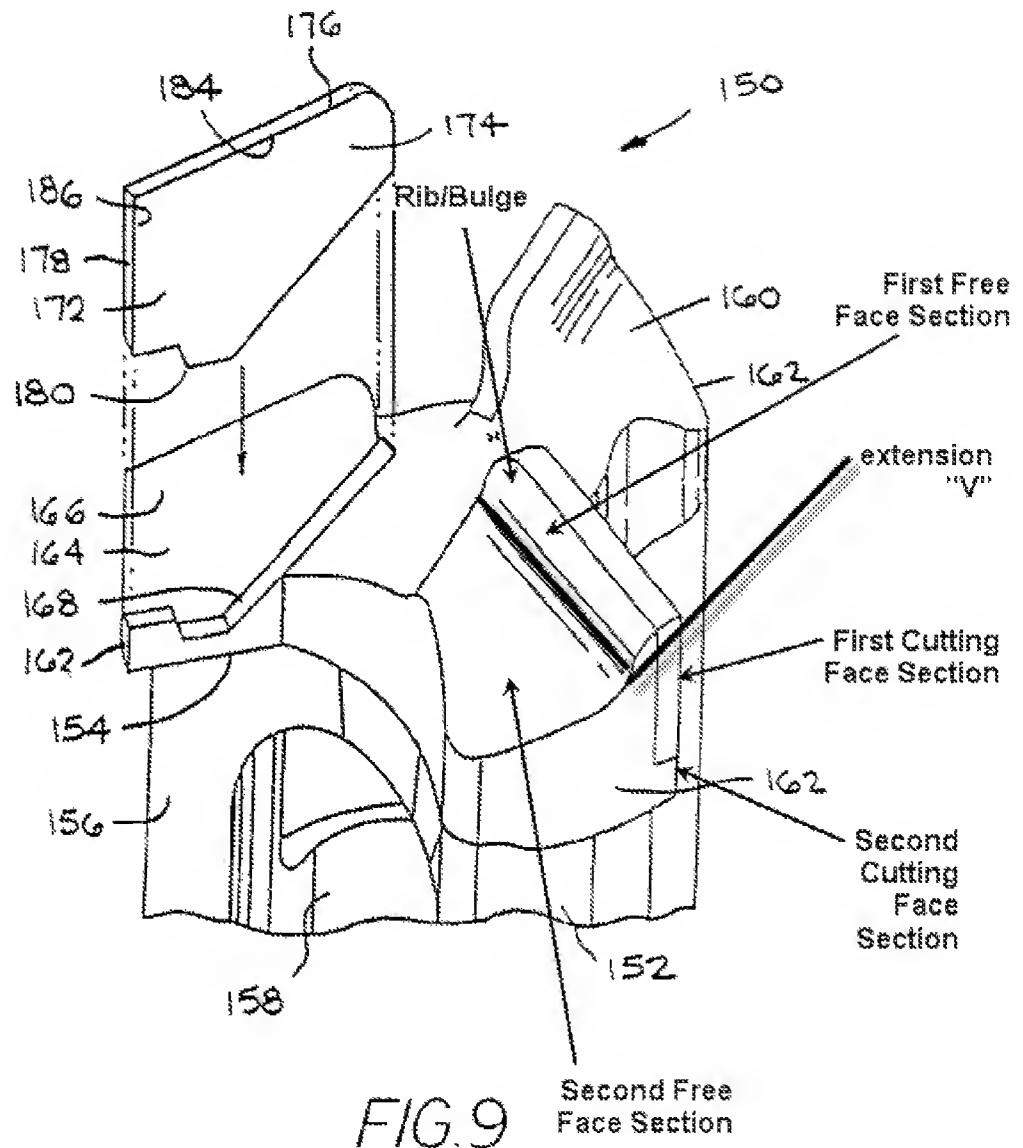


Figure 1 - Dunn et al. as it relates to the claimed invention.

Response to Arguments

3. Applicant's arguments filed November 13, 2008 have been fully considered but they are not persuasive.

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Applicant has argued that Dunn discloses a rib height of at least 2 mm, and therefore does not disclose the claimed rib height range. Examiner respectfully traverses this argument. Applicant has interpreted the Dunn reference as if the bottom of the rib *has* to be defined where it was indicated in applicant's Annex 2 (or in Figure 2 of Examiner's last Office Action). In fact, the bottom of the rib (i.e. the intersection between the first free face section and the second free face section) can be defined almost anywhere. As discussed above in Paragraph 2, examiner has defined the rib to have a height of 0.5 mm. Examiner can do this because the limitations "a first free face section" and "a second free face section" have little meaning. There is no structure (other than a convex bulge or polygon shape—which Dunn clearly teaches) or detailed shape description that actually defines what the first free face section is. Therefore, examiner can divide the free face into sections as desired, so long as the "convex bulge/outline" limitation is met, and so long as a rib is disclosed. To further illustrate the breadth of the "section" language, examiner respectfully asserts that any "face" can be thought of as being composed of one large "section," or many smaller "sections."

Finally, even if Dunn does not disclose the claimed rib height, examiner has added new grounds of rejection under 35 U.S.C. 103 to counter this argument.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT E. FULLER whose telephone

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number is (571)272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shane Bomar/
Primary Examiner, Art Unit 3676

08/17/2009
REF